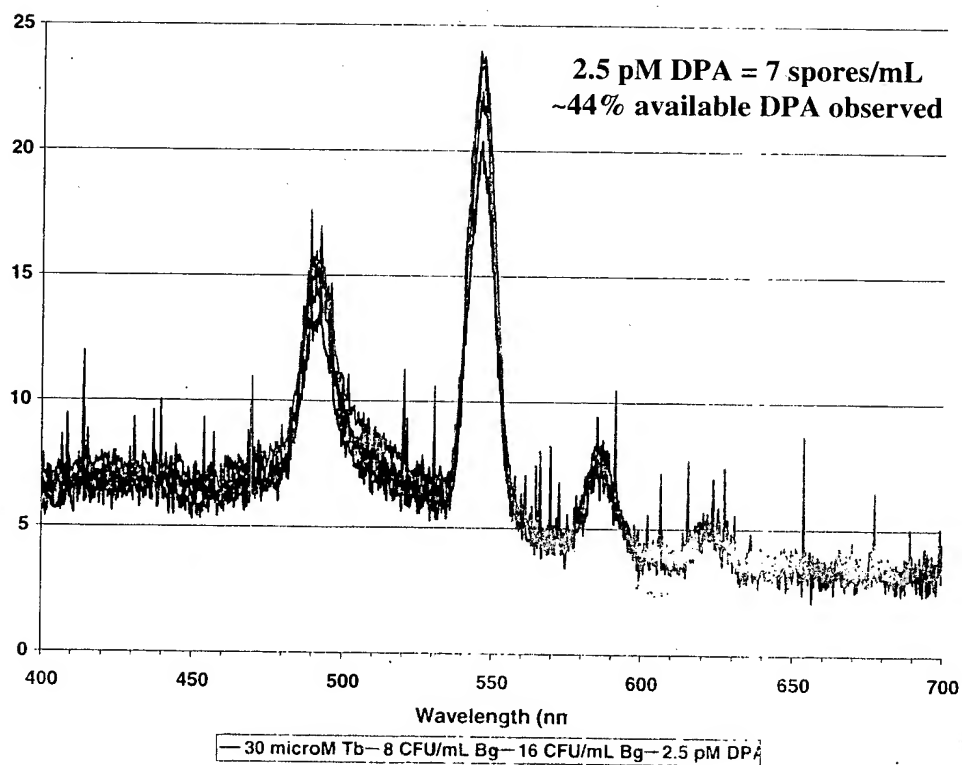
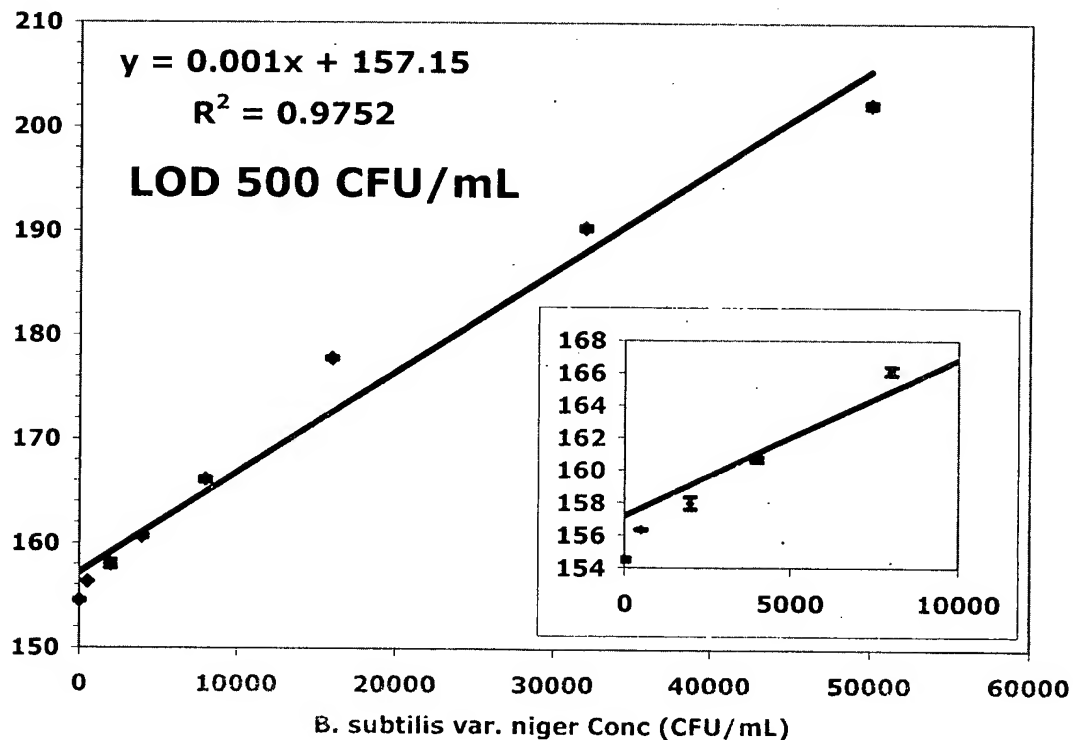


7. The trace on the above equipment is as follows:

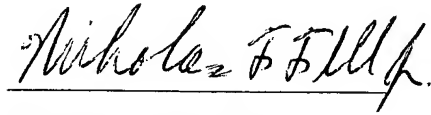


8. This level of detection is 10,000 times lower than the data shown in Vanderberg's patent and is a direct result of the use of the combination of the laser excitation, dipicolinic acid extraction, and phosphate interference suppression we claim in our submission. A more routinely achievable limit of detection is 500 CFU/mL as shown in the plot below from data obtained on this system on Oct. 16, 2002. The limit of detection is defined as the minimum concentration for which the signal equals the signal due to the background (in this case the Tb emission) plus 3 times the noise level in that signal. Even this level of detection is a 200 fold improvement compared to the values reported by Vanderberg.



8. All statements made herein of my own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may

jeopardize the validity of the application or any patent issuing thereon. That is all I
have to say at this time.

A handwritten signature in cursive script, reading "Nicholas F. Fell Jr.", written in black ink.

Nicholas F. Fell Jr. Ph.D.

Date: 16 November 2006